

Using Biogenic Silica, Pb-210 dating and Loss on Ignition analysis to see how land management affects shallow lakes

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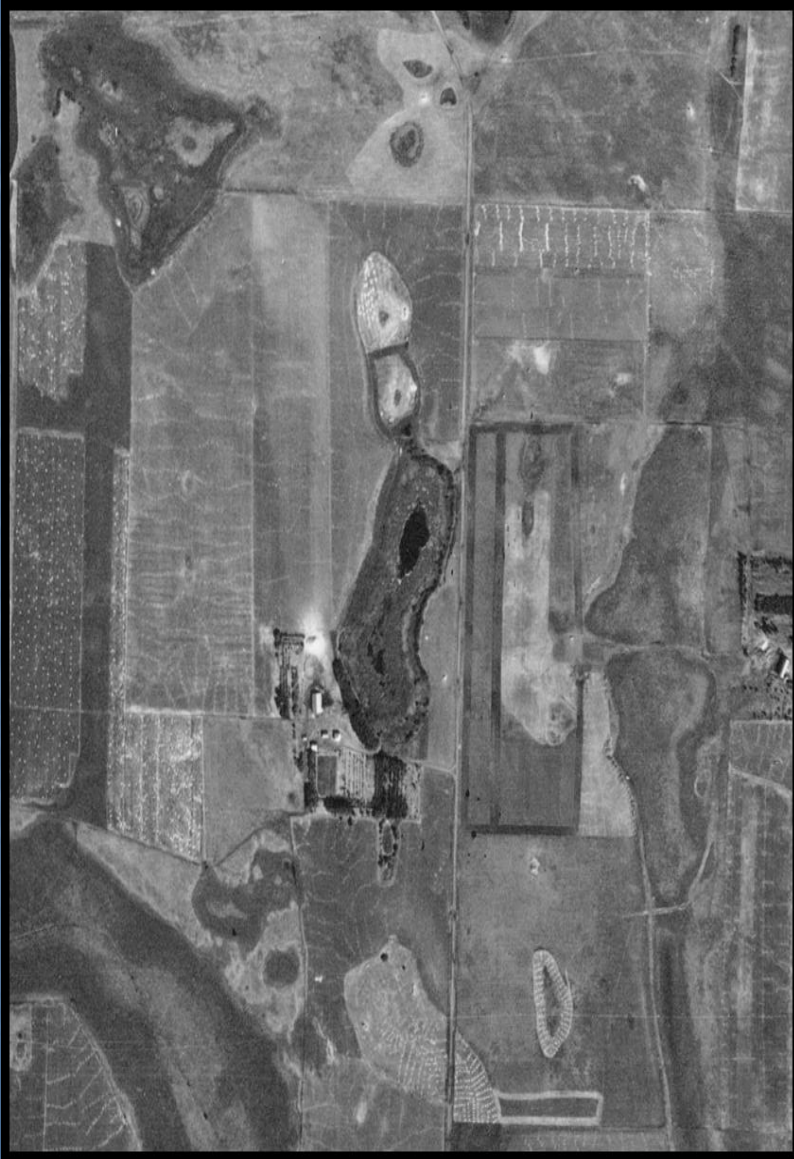
Birds eye view of Blakesley



Introduction:

- Shallow lakes are very numerous in Minnesota
- Agricultural changes to western Minnesota along with droughts in the 1930's brought destruction of prairies and drainage of small lakes respectively
- In 1929 The government passed the federal duck stamp act.

1938



2010



Objectives

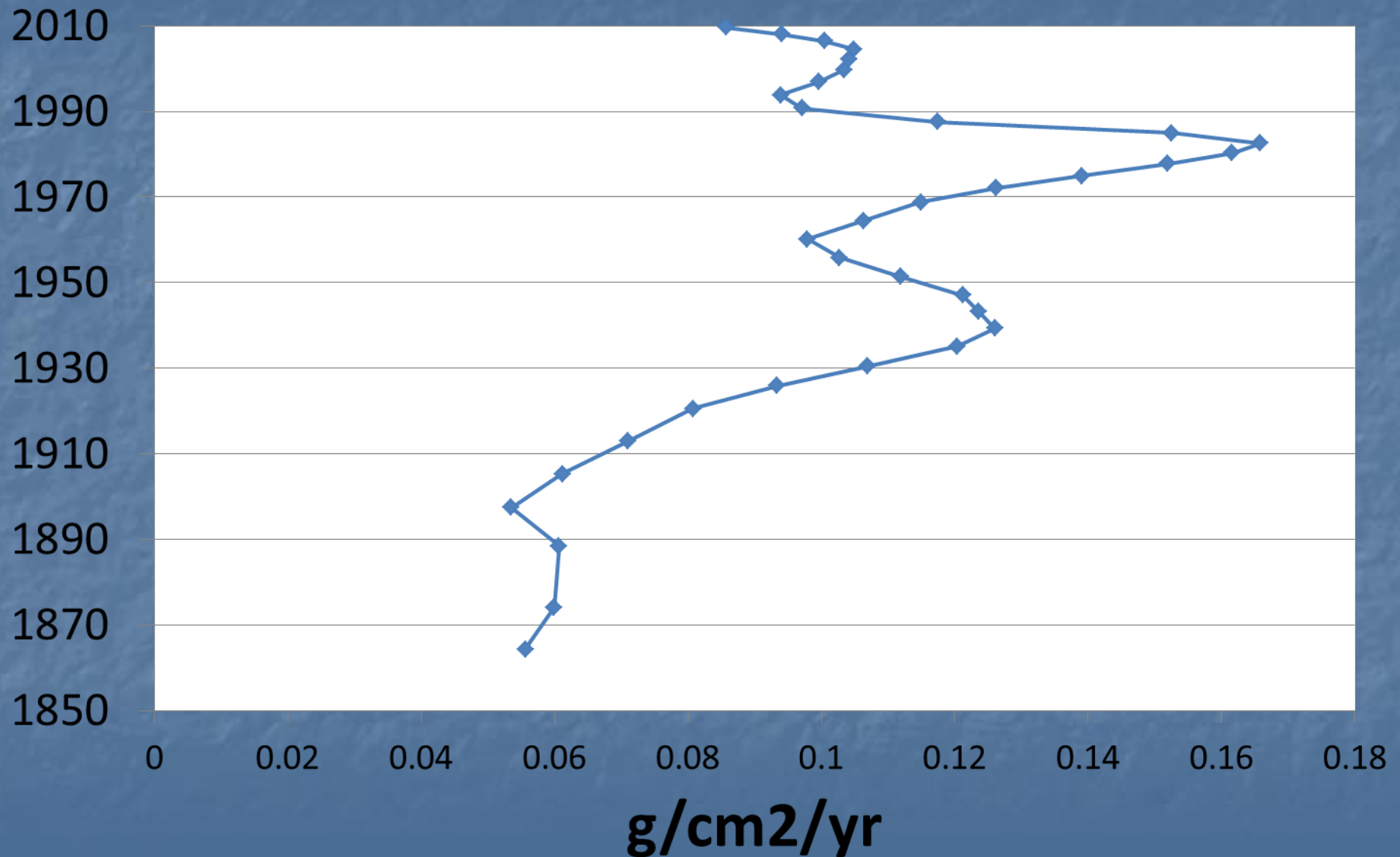
- Provide a historical record of a shallow lake.
- See if turning Blakesley lake into a WPA had a positive affect on the lake.



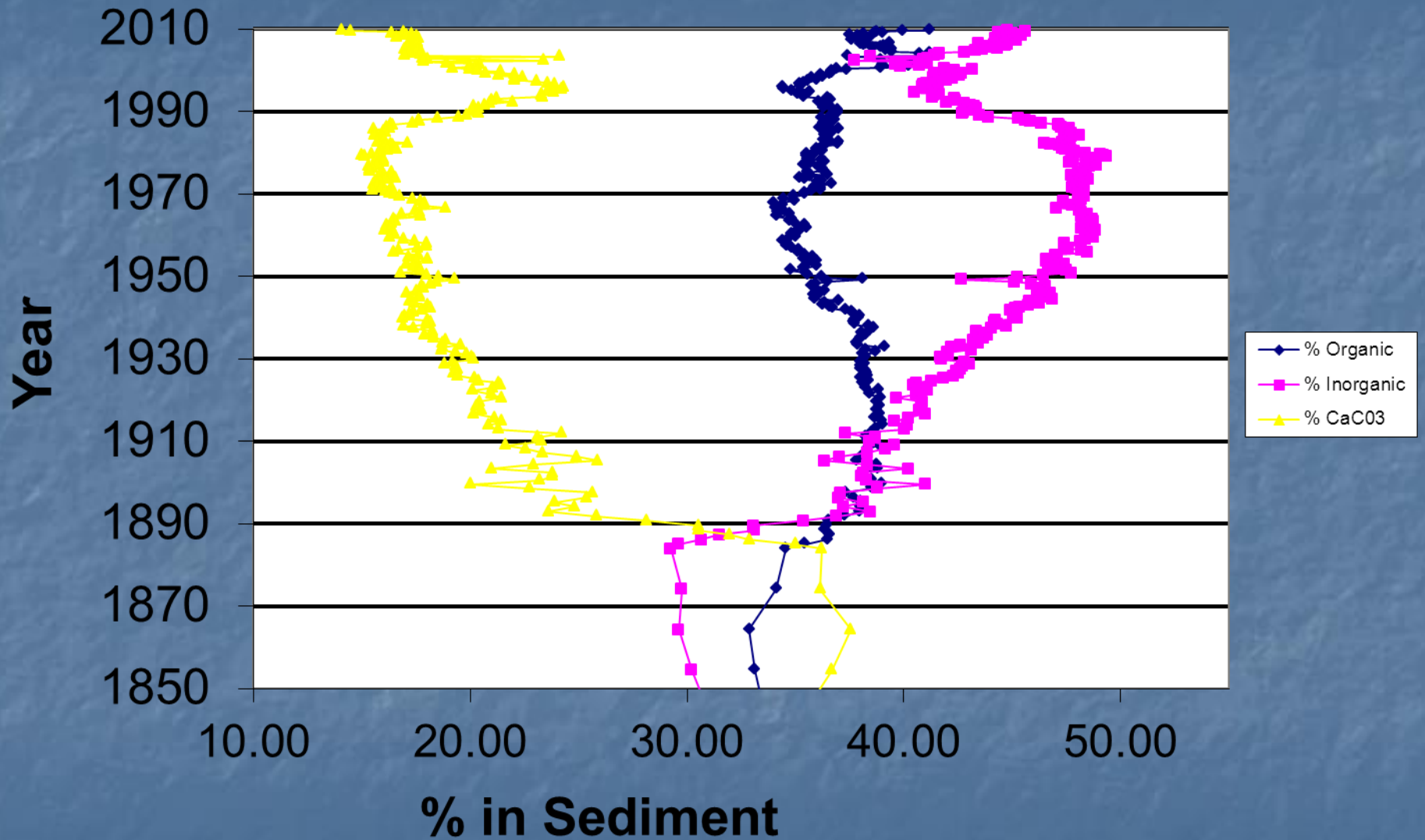
Blakesley WPA
Grant County
US Fish and Wildlife Service
Fergus Falls Wetland Management District

- Portions of the WPA were added in 1967 and the final section was added in 1978
- Lands that were restored to prairie grasslands had been an agricultural farm

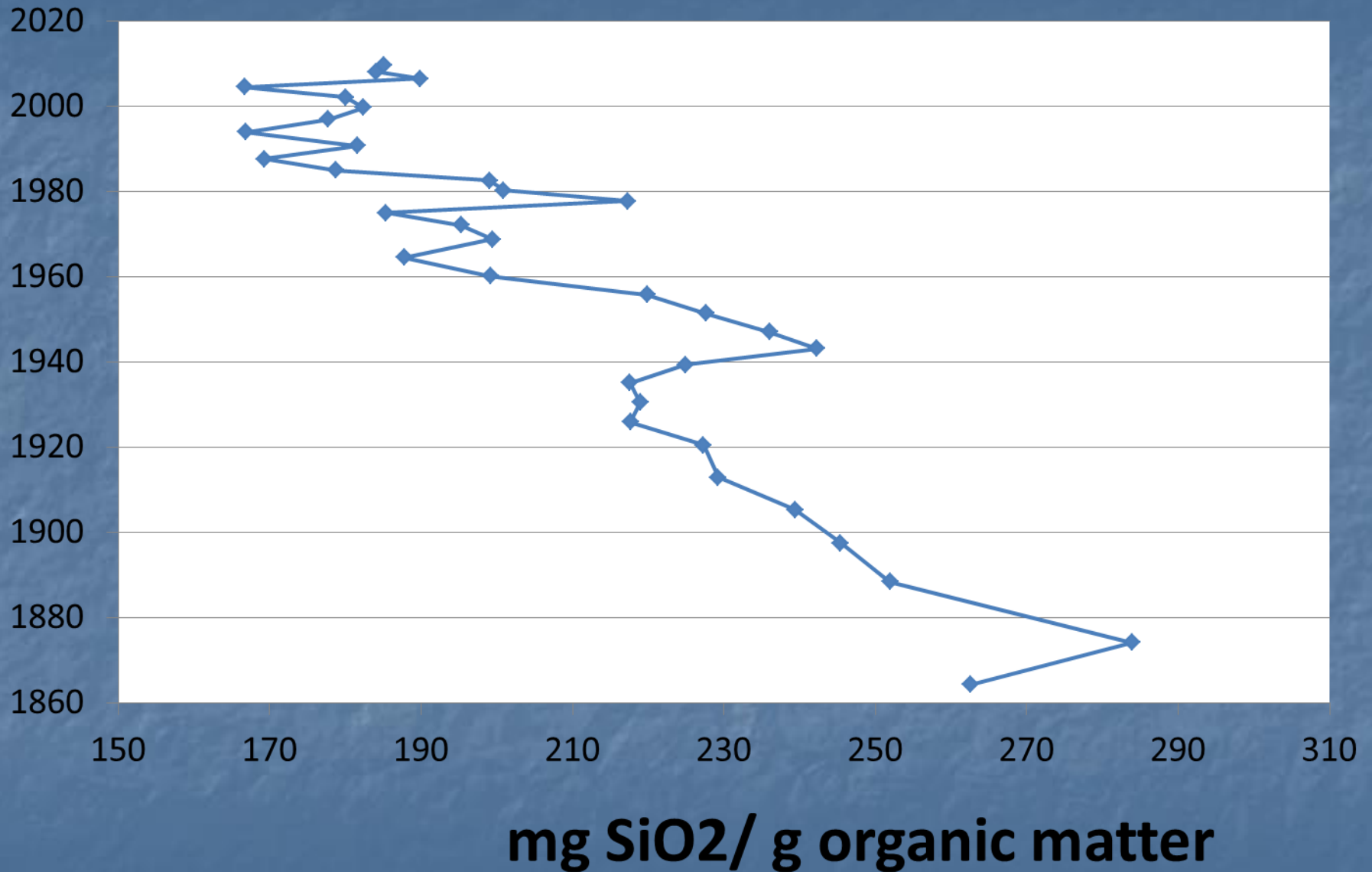
Sedimentation Rate



Blakesley Lake LOI



BSI per gram organic matter



MN PDSI data

